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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/642,374	08/15/2003	Eric Hudak	550270-00003	2568
26711	7590	07/19/2005	EXAMINER	
QUARLES & BRADY LLP 411 E. WISCONSIN AVE. SUITE 2040 MIWAUKEE, WI 53202-4497			CORRIGAN, JAIME W	
			ART UNIT	PAPER NUMBER
			3748	

DATE MAILED: 07/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/642,374

Applicant(s)

HUDAK, ERIC

Examiner

Jaime W. Corrigan

Art Unit

3748

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 May 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 8 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-5, 7 and 9-12 is/are allowed.
- 6) ☒ Claim(s) 1 and 13-16 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

In view of more pertinent prior art the indication of allowability of claim 9-10 and the Final rejection of claims 1-7, 11-12 is hereby withdrawn. Claims 1-7, 10, 12 have been amended. Claim 8 has been canceled. Claims 13-16 have been added. A new Non-final rejection is set forth below.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 13, 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagai et al. (PN 6,394,060) in view of Tatebe et al. (PN 4,404,936).

Nagai discloses a crankcase (See Figure 1 (20)) having walls which define an interior volume for containing oil and which define a cylinder; a piston (See Figure 1 (6)) moveably positioned within the cylinder of the crankcase; a cylinder head (See Figure 1 (4)) having a proximal end fastened to the crankcase, the cylinder head extending laterally outward from the crankcase and terminating at a distal end; a rocker arm cover (See Figure 2 (4a)), fastened to the distal end of the cylinder head, the rocker arm cover defining a cavity therein which forms a valve box (See Figure 1 (15)); a drainback passage (See Figure 1 (40)) interconnecting the interior volume of the crankcase and the valve box to enable the flow of fluid from the valve box to the interior volume of the

crankcase (See Column 4 Lines 44-61); and a check valve (See Figure 1 (41)), disposed within the drainback passage, for allowing the flow of fluid from the valve box to the interior volume of the crankcase and preventing the flow of fluid from the interior volume of the crankcase to the valve box (See Column 4 Lines 57-61), wherein the check valve is seated against a bore (See Figure 1 (40)) defining at least a portion of the drainback passage (See Figure 1 (40)) at the proximal end of the cylinder head (See Figure 1 (4)) to prevent the flow of fluid from the interior volume of the crankcase to the valve box (See Column 4 Lines 57-61); the drainback passage (See Figure 1 (40)) is formed as an integral part of the cylinder head (See Figure 1 (4)) and the crankcase (See Figure 1 (22)); the check valve (See Figure 1 (41)) is configured so that when the crankcase (See Figure 1 (22)) is tipped beyond a predetermined angle, the check valve substantially prevents the flow of fluid from the interior volume of the crankcase to the valve box regardless of a position of the piston (See Column 4 Lines 57-61).

Nagai fails to disclose a check ball and the check valve prevents the flow of fluid from the interior volume of the crankcase to the valve box when there is high pressure present within the crankcase or when the engine is operated at an elevated angle.

Tatebe teaches that it is conventional in the art to utilize a check ball (See Figure 7 (61), Figure 8 (64)) prevents the flow of fluid from the interior volume of the crankcase to the valve box when there is high pressure (See Column 2 Lines 39-45, Column 4 Lines 19-68, Column 5 Lines 1-17) present within the crankcase or when the engine is operated at an elevated angle.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the check ball preventing fluid flow taught by Tatebe in the Nagai device since it would improve fluid flow control.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nagai in view of Tatebe as applied to claim 1 above, and further in view of MacGuire (PN 4,024,846).

Nagai discloses the invention as recited in claim 1 above, however, fails to disclose the check ball is formed of a fluorocarbon material.

MacGuire teaches that it is conventional in the art to utilize the check ball is formed of a fluorocarbon material (See Figure 2 (20-22), Column 2 Lines 10-15).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilized the fluorocarbon check ball taught by MacGuire in the Nagai device since it would improve engine weight reduction.

#### ***Allowable Subject Matter***

Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 2-5, 7, 9-12 are allowed.

### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Gillbrand et al. (PN 5,611,301), Kandler (PN 4,579,092) disclose similar drainback systems.

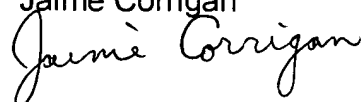
Any inquiry concerning this communication from the Examiner should be directed to Examiner Jaime Corrigan whose telephone number is (571) 272-4858. The Examiner can normally be reached on Monday – Friday from 8:30 a.m. – 6:00 p.m. 2<sup>nd</sup> Friday off.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Thomas E. Denion, can be reached on (571) 272-4859. The fax number for this group is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-3700.

JC


Jaime Corrigan  


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Art Unit: 3748

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July 07, 2005

Patent Examiner  
Art Unit 3748

  
THOMAS DENION  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700